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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/022,836

12/20/2001

Jung-Gug Pac

1293.1275

1469

21171 7590 10/09/2007  
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EXAMINER

ORTIZ CRIADO, JORGE L

ART UNIT

PAPER NUMBER

2627

MAIL DATE

DELIVERY MODE

10/09/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	Application No. 10/022,836	Applicant(s) PAE ET AL.	
	Examiner Jorge L. Ortiz-Criado	Art Unit 2627	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 09 July 2007.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,3-13 and 15-22 is/are pending in the application.
- 4a) Of the above claim(s) 3-8,11,12 and 15-18 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,9, 10, 13 and 19-22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 1,9,10, 13 and 19-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's admitted prior art in view of Yasuda et al. (J.P. Publication No. 11-339294).

In regard to claim 1, Applicant's admitted prior art discloses an optical pickup (Figs. 1 and 2) for use with a disc (D), comprising: a yoke (9), a blade (2) on which an objective lens (1) is mounted and which is movably supported with respect to a holder (8) by an elastic support (6); a focus coil (3) and a tracking coil (4) mounted on the blade; a magnet (10) generating an electromagnetic force driving the blade in focusing (z) and tracking (x) directions with respect to the disc, electromagnetic force generated by current flowing through at least one of the focus and tracking coils (see page paragraphs of the specification [004]-[005]); wherein the magnet is displaced to a position with respect to the yoke such that the electromagnetic force acts on the blade (See Fig. 2).

Applicant admitted prior art fails to teach wherein the magnet is displaced a predetermined distance from a center line of the yoke to an asymmetric position such that the electromagnetic force acts on the blade asymmetrically and in a radial direction of the disc toward the outer circumference of the disc.

However this is well known in the art and is evidenced by Yasuda et al., which discloses an optical pickup for use with a disc, comprising: a yoke (9), a blade (4) on which an objective lens (1) is mounted and which is movably supported with respect to a holder (6) by an elastic support (5); a focus coil (2) and a tracking coil (3) mounted on the blade; a magnet (8) generating an electromagnetic force driving the blade in focusing (z) and tracking (x) directions with respect to the disc, electromagnetic force generated by current flowing through at least one of the focus and tracking coils (see [0003]); wherein the magnet is displaced a predetermined distance from a center line to an asymmetric position such that the electromagnetic force acts on the blade asymmetrically and in a radial direction of the disc toward the outer circumference of the disc (see [0016]; Fig. 1 (b); Fig. 4), such that when the blade moves upward, a positive direction radial rolling occurs (positive radial tilt) in a direction of an optical axis of the objective lens that is tilted toward an inner circumference of the disc, and when the blade moves downward, a negative direction radial rolling (negative radial tilt) occurs in a direction of the optical axis of the objective lens that is tilted toward the outer circumference of the disc (See Fig. 4, Yasuda et al. explains that the electromagnetic force acts on the blade depending on the position of the magnet causing, as shown, the change in radial rolling/tilt).

Therefore it would have been obvious to one of an ordinary skill in the art at the time of the invention to move the magnet to a predetermined position from a center line of the yoke in

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order to select the desired electromagnetic force acting on the blade, because the electromagnetic force acts on the blade depending on the position of the magnet, controlling the desired change in radial rolling/tilt, as taught by Yasuda et al.

Regarding claims 9 and 10, they have limitations similar to those treated in the above rejection(s), and are met by the references and rejected for the same reasons of obviousness as discussed above.

In regard to claim 13, claim 13 has limitations similar to those treated in the above rejection(s), and is met by the references as discussed above. Claim 13 however also recite the limitations of a turntable and a motor, which are taught by Applicant admitted prior art, elements (11) and (12) in Figs. 1 and 2.

Regarding claims 19-22, Applicant admitted prior art further discloses wherein the magnet includes a first magnet and a second magnet (10) that are positioned opposite to each other with the blade placed there between (Fig. 1).

### ***Response to Arguments***

Applicant's arguments with respect to claims 1, 9, 10, 13 and 19-22 have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jorge L. Ortiz-Criado whose telephone number is (571) 272-7624. The examiner can normally be reached on Mon.-Fri 10:00 am- 6:30 pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Korzuch can be reached on (571) 272-7589. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

joc

/William Korzuch/  
SPE, Art Unit 2627